



Vegetation Unit Summaries for **River View Natural Area (RVNA)**

Report date: 11/14/2013

'\*' = non-native invasive species

Visit data as of: 11/14/2013

**Unit RVNA\*001**

**Size:** 2.2 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Deciduous forest

**NVCS Group:** Cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Broad flat > 600'

**Slope:** Gentle (10 to 20%)

**Aspect:** West

**Visit date: 9/9/2011**

**Ecological Health:** Good.

**% Tree canopy:** 80%

**% Non-Native Cover:** 40

**General Note:**

Unit is just east of Palatine Hill Road, east of Trail 3B

**Management Note:**

Address invasive species

**Eco Note:**

Unique wetland with species diversity but invasive are beginning to encroach

**Wetland indicators:** Hydrophilic Vegetation, Silt, Water Marks.

**Primary Management concerns:** Invasives.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Fraxinus latifolia (Oregon ash)	50% to 75%	Y	20-30"	Y	
Rubus discolor (Himalayan blackberry)	20% to 50%				
Salix scouleriana (Scouler's willow)	10% to 20%		20-30"		
Acer macrophyllum (bigleaf maple)	10% to 20%		10-20"		
Acer circinatum (vine maple)	10% to 20%				
Carex obnupta (slough sedge)	10% to 20%				
Hedera helix (English ivy)	10% to 20%				
Polystichum munitum (sword fern)	10% to 20%				
Ranunculus repens (creeping buttercup)	10% to 20%				
Stachys cooleyae (Cooley's hedgenettle)	10% to 20%				
Alnus rubra (red alder)	1% to 10%		10-20"	Y	
Thuja plicata (western red cedar)	1% to 10%		5-10"		
Amelanchier alnifolia (serviceberry)	1% to 10%				
Bromus vulgaris (narrow-flowered Columbian Colum)	1% to 10%				
Carex deweyana (Dewey sedge)	1% to 10%				
Clematis vitalba (clematis)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Elymus glaucus (blue Vancouver wildrye)	1% to 10%				
Gaultheria shallon (salal)	1% to 10%				
Geranium robertianum (herb-Robert)	1% to 10%				
Holodiscus discolor (oceanspray)	1% to 10%				
Rosa gymnocarpa (dwarf wood rose)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Tolmiea menziesii (piggy-back plant)	1% to 10%				

Vaccinium parvifolium (red huckleberry)	1% to 10%	
Betula pendula (European white birch)	trace	10-20"
Arctium minus (lesser burdock)	trace	
Athyrium filix-femina (ladyfern)	trace	
Carex hendersonii (Henderson's wood sedge)	trace	
Epilobium ciliatum ssp. watsonii (fringed willow)	trace	
Equisetum arvense (field horsetail)	trace	
Galium triflorum (sweet-scented fragrant Bedstra)	trace	
Geum macrophyllum (largeleaf avens)	trace	
Geum urbanum (herb bennet)	trace	
Ilex aquafolium (English holly)	trace	
Juncus effusus (common soft Pacific rush)	trace	
Lapsana communis (common nipplewort)	trace	
Lonicera ciliosa (western orange honeysuckle)	trace	
Oemleria cerasiformis (Indian-plum)	trace	
Oenanthe sarmentosa (Pacific water-parsely)		trace
Osmorhiza chilensis (mountain sweet-cicely)		trace
Phalaris arundinacea (reed canarygrass)	trace	
Plantago major (common plantain)	trace	
Polypodium glycyrrhiza (licorice fern)	trace	
Prunus avium (sweet pie cherry)	trace	
Prunus cerasifera (cherry plum)	trace	
Prunus laurocerasus (English laurel)	trace	
Pteridium aquilinum (bracken fern)	trace	
Rhamnus purshiana (cascara)	trace	
Rosa pisocarpa (cluster wild peafruit swamp Rose)	trace	
Rubus leucodermis (Western black-cap)	trace	
Rubus parviflorus (thimbleberry)	trace	
Rumex obtusifolius (bitter dock)	trace	
Solanum dulcamara (bittersweet nightshade)	trace	
Vancouveria hexandra (white inside-out-flower)	trace	
Veronica L. (speedwell)	trace	

## Unit RVNA\*002

**Size:** 7.67 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Deciduous forest

**NVCS Group:** Cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Canyon bottom < 600'

**Slope:** Extremely Steep (over 30%)

**Aspect:** East

## Visit date: 9/12/2011

**Ecological Health:** Fair.

**% Tree canopy:** 95%

**% Non-Native Cover:** 70

### General Note:

Unit is riparian corridor of Stream #6. Includes waterfall camp area and tree fort.

### Management Note:

Camp is currently unoccupied and in the past has been kept tidy. Since signage "Closed for Restoration" has been posted there has been no active camping. Address invasive species. Remove tree fort 75' up in TSHE. Stream erosion is small and localized. Precipitate from Lewis and Clark historic (reported to DEQ in 2009) pool discharge into Stream #6.

### Eco Note:

Invasive species are present and entering from unit margin but overall the site has intact structure and greater species diversity than found adjacent to this unit. Dominated by deciduous canopy, conifers line unit edge. Deer trail near creek, barred owl observed on multiple occasions in this area.

**Wetland indicators:** Streams, Surface Water, Saturated Soils, Standing Flowing Water.

**Primary Management concerns:** Invasives, Erosion, Litter, Homeless Camp, Vandalism, Stream Bank Erosion, Informal Trails.

## Visit Species:

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	10-20"			
Hedera helix (English ivy)	20% to 50%	Y			
Polystichum munitum (sword fern)	20% to 50%	Y			
Alnus rubra (red alder)	10% to 20%		5-10"		
Acer circinatum (vine maple)	1% to 10%	Y			
Rubus spectabilis (salmonberry)	1% to 10%	Y			
Tsuga heterophylla (western hemlock)	1% to 10%		20-30"	Y	
Thuja plicata (western red cedar)	1% to 10%		10-20"		
Athyrium filix-femina (ladyfern)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Tolmiea menziesii (piggy-back plant)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Vancouveria hexandra (white inside-out-flower)	1% to 10%				
Abies grandis (grand fir)	trace		20-30"		
Adiantum pedatum (maidenhair fern)	trace				
Alliaria petiolata (garlic mustard)	trace				
Blechnum spicant (deer fern)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum)	trace				
Carex deweyana (Dewey sedge)	trace				
Clematis vitalba (clematis)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Disporum smithii (Smith's fairybells)	trace				
Dryopteris arguta (coastal shield-fern)	trace				
Equisetum arvense (field horsetail)	trace				
Gaultheria shallon (salal)	trace				
Geranium robertianum (herb-Robert)	trace				
Geum urbanum (herb bennet)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Oemleria cerasiformis (Indian-plum)	trace				
Osmorhiza chilensis (mountain sweet-cicely)	trace	trace			
Parthenocissus quinquefolia (Virginia creeper)	trace				
Poa species (bluegrass)	trace				
Polypodium glycyrrhiza (licorice fern)	trace				
Ranunculus repens (creeping buttercup)	trace				
Rhamnus purshiana (cascara)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus discolor (Himalayan blackberry)	trace				
Rubus parviflorus (thimbleberry)	trace				
Rumex obtusifolius (bitter dock)	trace				
Sambucus racemosa (red elderberry)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Stachys cooleyae (Cooley's hedgenettle)	trace				
Streptopus amplexifolius (clasping-leaf twisted-	trace				
Symphoricarpos albus (snowberry)	trace				
Tiarella trifoliata (foamflower)	trace				
Trillium ovatum (trillium)	trace				

## Unit RVNA\*003

**Size:** 5.95 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Lower 3rd

**Slope:** Extremely Steep (over 30%)

**Aspect:** Southeast

**Visit date:** 9/14/2011

**Ecological Health:** Poor.

**% Tree canopy:** 90%

**% Non-Native Cover:** 100

**General Note:**

Unit is along southern boundary and can be accessed by Trail #3. Stream #7 flows through the eastern portion. Unit is on an extremely steep slope so it was not possible to walk all of the southern boundary, walked as far as was passable.

**Management Note:**

Address invasives, SE boundary needs to be completely marked.  
 Failing culvert noted upstream of BES pump station on Hwy 43.  
 Trail #3 severely rutted from mountain biking in winter.

**Eco Note:**

Several large diameter (20" dbh) snags about 6 feet tall.  
 Large amounts of coarse wood, pileated sign.  
 60-70 dbh stump with TSHE regen.  
 Site becomes more degraded toward the east and presence of invasive vines increases in canopy. Some deer browse.

**Wetland indicators:** Streams.

**Primary Management concerns:** Invasives, Litter, Mountain Bike Impact, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	10-20"	Y		
Hedera helix (English ivy)	over 75% Y				
Ilex aquafolium (English holly)	20% to 50%	Y			
Polystichum munitum (sword fern)	10% to 20%	Y			
Prunus avium (sweet pie cherry)	10% to 20%		10-20"	Y	
Thuja plicata (western red cedar)	10% to 20%		10-20"	Y	
Clematis vitalba (clematis)	10% to 20%				
Acer circinatum (vine maple)	1% to 10%	Y			
Corylus cornuta (western beaked hazelnut)	1% to 10%	Y			
Pseudotsuga menziesii (Douglas fir)	1% to 10%		20-30"	Y	
Abies grandis (grand fir)	1% to 10%		10-20"	Y	
Aesculus species (Horshechestnut species)	1% to 10%		10-20"	Y	
Alnus rubra (red alder)	1% to 10%		10-20"		
Tsuga heterophylla (western hemlock)	1% to 10%		10-20"	Y	
Berberis nervosa (Oregon grape)	1% to 10%				
Prunus lusitanica (Portugal laurel)	1% to 10%				
Rubus discolor (Himalayan blackberry)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Populus balsamifera ssp. trichocarpa (black cott	trace		20-30"	Y	
Acer platanoides (Norway maple)	trace		0-5"		
Fraxinus latifolia (Oregon ash)	trace		0-5"	Y	
Taxus brevifolia (Pacific yew)	trace		0-5"		
Amelanchier alnifolia (serviceberry)	trace				
Athyrium filix-femina (ladyfern)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum	trace				
Crataegus monogyna (European hawthorn)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Gaultheria shallon (salal)	trace				
Geum macrophyllum (largeleaf avens)	trace				
Glyceria elata (fowl tall Mannagrass)	trace				
Holodiscus discolor (oceanspray)	trace				
Oemleria cerasiformis (Indian-plum)	trace				
Philadelphus lewisii (Lewis' mockorange)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rumex obtusifolius (bitter dock)	trace				
Sambucus racemosa (red elderberry)	trace				
Smilacina racemosa (false Solomon's-seal)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Symphoricarpos albus (snowberry)	trace				
Toxicodendron diversilobum (poison oak)	trace				
Urtica dioica (stinging nettle)	trace				

**Unit RVNA\*004**

**Size:** 3.81 Acres  
**NVCS Class:** Forest  
**NVCS Subclass:** Deciduous forest  
**NVCS Group:** Cold-deciduous forest  
**NVCS SubGroup:** Natural / Semi-natural  
**NVCS Ecological System:** unknown

**Landform:** Side-hill, Middle 3rd  
**Slope:** Steep (20 to 30%)  
**Aspect:** Northeast

**Visit date:** 9/13/2011

**Ecological Health:** Poor.

**% Tree canopy:** 90%

**% Non-Native Cover:** 100

**General Note:**

Unit is bordered by Trails 3, 2,1 and 3A, just west of bike jump area.

**Management Note:**

Address invasive species.

**Eco Note:**

Unit is inundated with ivy. 100% of trees have ivy growing into canopy, many have fallen down. Mid-story is largely absent, very little diversity in understory.

**Primary Management concerns:** Invasives, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75%				
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"		
Ilex aquafolium (English holly)	10% to 20%	Y			
Polystichum munitum (sword fern)	10% to 20%				
Prunus laurocerasus (English laurel)	10% to 20%				
Alnus rubra (red alder)	1% to 10%		10-20"		
Thuja plicata (western red cedar)	1% to 10%		5-10"	Y	
Acer circinatum (vine maple)	1% to 10%				
Clematis vitalba (clematis)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Rubus spectabilis (salmonberry)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	trace	Y			
Populus balsamifera ssp. trichocarpa (black cott)	trace		20-30"		
Pseudotsuga menziesii (Douglas fir)	trace		5-10"		
Taxus brevifolia (Pacific yew)	trace		5-10"		
Tsuga heterophylla (western hemlock)	trace		5-10"	Y	
Acer platanoides (Norway maple)	trace		0-5"	Y	
Corylus cornuta (western beaked hazelnut)	trace				
Crataegus monogyna (European hawthorn)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Polypodium glycyrrhiza (licorice fern)	trace				
Prunus lusitanica (Portugal laurel)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rhamnus purshiana (cascara)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus discolor (Himalayan blackberry)	trace				
Rubus parviflorus (thimbleberry)	trace				
Rubus ursinus (trailing blackberry)	trace				
Tolmiea menziesii (piggy-back plant)	trace				
Trillium ovatum (trillium)	trace				

## Unit RVNA\*005

**Size:** 3.78 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.002 North Pacific Maritime-Wet-Mesic Douglas fir-

Western Hemlock Forest

**Landform:** Side-hill, Upper 3rd

**Slope:** Extremely Steep (over 30%)

**Aspect:** Northeast

**Visit date: 9/13/2011**

**Ecological Health: Poor.**

**% Tree canopy: 95%**

**% Non-Native Cover: 95**

**General Note:**

Unit is close to Lewis & Clark, demand trails at high densities through area and evidence of partying. "Art Camp" in this unit, tiles epoxied and "art" nailed into trees. Research plots from L&C in this area.

**Management Note:**

Address invasive species. Outreach to Lewis & Clark about vandalism of trees and research plots.

**Eco Note:**

Down wood, lots of large pieces.

Less diversity than other units due to the high percentage of invasive species.

**Primary Management concerns: Invasives, Litter, Vandalism, Informal Trails.**

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75%	Y			
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	20-30"		
Ilex aquafolium (English holly)	10% to 20%	Y			
Polystichum munitum (sword fern)	10% to 20%	Y			
Tsuga heterophylla (western hemlock)	10% to 20%		20-30"		
Alnus rubra (red alder)	10% to 20%		10-20"		
Acer circinatum (vine maple)	1% to 10%	Y			
Thuja plicata (western red cedar)	1% to 10%		10-20"		
Athyrium filix-femina (ladyfern)	1% to 10%				
Berberis nervosa (Oregon grape)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rubus discolor (Himalayan blackberry)	1% to 10%				
Rubus spectabilis (salmonberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Prunus avium (sweet pie cherry)	trace		10-20"		
Rhamnus purshiana (cascara)	trace		5-10"		
Taxus brevifolia (Pacific yew)	trace		5-10"		
Adiantum pedatum (maidenhair fern)	trace				
Equisetum arvense (field horsetail)	trace				
Gaultheria shallon (salal)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Lapsana communis (common nipplewort)	trace				
Oemleria cerasiformis (Indian-plum)	trace				
Osmorhiza chilensis (mountain sweet-cicely)	trace	trace			
Polypodium glycyrrhiza (licorice fern)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rubus ursinus (trailing blackberry)	trace				
Sambucus racemosa (red elderberry)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Symphoricarpos albus (snowberry)	trace				
Tolmiea menziesii (piggy-back plant)	trace				
Vancouveria hexandra (white inside-out-flower)	trace				

## **Unit RVNA\*006**

**Size: 8.98 Acres**

**NVCS Class: Forest**

**NVCS Subclass: Deciduous forest**

**NVCS Group: Cold-deciduous forest**

**NVCS SubGroup: Natural / Semi-natural**

**NVCS Ecological System: unknown**

**Landform: Side-hill, Lower 3rd**

**Slope: Steep (20 to 30%)**

**Aspect: East**

**Visit date: 9/14/2011**

**Ecological Health: Poor.**

**% Tree canopy: 95%**

**% Non-Native Cover: 95**

**General Note:**

Unit bounded by Trails 3, 3a and 2. Bike jumps run through central portion of unit.

**Management Note:**

Culverts, several are failing; above-ground culvert is not functional

Remove old concrete dam

Address failing section of Trail 2, downstream of tree fort

Remove bike jumps

**Eco Note:**

Red breasted nuthatch

Ivy work apparent on edge of property

Creek goes subsurface in some areas

Site has a higher percentage of invasives and is more degraded in the East and Central part of the unit

Large percent of tree ivy in canopy and understory

Snags present, covered in ivy

**Wetland indicators:** Streams, Hydrophilic Vegetation, Surface Water.

**Primary Management concerns:** Invasives, Trampling, Soil Compaction, Litter, Hardscape Infrastructure, Vandalism, Mountain Bike Impact, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	20-30"		Y	
Hedera helix (English ivy)	over 75% Y				
Thuja plicata (western red cedar)	10% to 20%	Y	10-20"	Y	
Polystichum munitum (sword fern)	10% to 20%	Y			
Prunus laurocerasus (English laurel)	10% to 20%	Y			
Rubus spectabilis (salmonberry)	10% to 20%	Y			
Alnus rubra (red alder)	10% to 20%		10-20"		
Prunus avium (sweet pie cherry)	1% to 10%		10-20"		
Acer circinatum (vine maple)	1% to 10%				
Athyrium filix-femina (ladyfern)	1% to 10%				
Clematis vitalba (clematis)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Pteridium aquilinum (bracken fern)	1% to 10%				
Rubus discolor (Himalayan blackberry)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Populus balsamifera ssp. trichocarpa (black cott	trace		>30"	Y	
Pseudotsuga menziesii (Douglas fir)	trace		>30"		
Tsuga heterophylla (western hemlock)	trace		10-20"	Y	
Acer platanoides (Norway maple)	trace		0-5"		
Taxus brevifolia (Pacific yew)	trace		0-5"	Y	
Adiantum pedatum (maidenhair fern)	trace				
Berberis nervosa (Oregon grape)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum	trace				
Carex deweyana (Dewey sedge)	trace				
Crataegus monogyna (European hawthorn)	trace				
Epilobium ciliatum ssp. watsonii (fringed willow	trace				
Equisetum arvense (field horsetail)	trace				
Gaultheria shallon (salal)	trace				
Geum macrophyllum (largeleaf avens)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Lapsana communis (common nipplewort)	trace				
Luzula parviflora (small-flowered millet Woodrus	trace				
Oenanthe sarmentosa (Pacific water-parsely)	trace	trace			
Philadelphus lewisii (Lewis' mockorange)	trace				
Polypodium glycyrrhiza (licorice fern)	trace				
Prunus cerasifera (cherry plum)	trace				
Ranunculus repens (creeping buttercup)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus leucodermis (Western black-cap)	trace				
Rumex crispus (dock)	trace				
Stachys cooleyae (Cooley's hedgenettle)	trace				
Symphoricarpos albus (snowberry)	trace				
Tolmiea menziesii (piggy-back plant)	trace				
Trillium ovatum (trillium)	trace				

**Unit RVNA\*007**

**Size:** 9.40 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.002 North Pacific Maritime-Wet-Mesic Douglas fir-Western hemlock

**Landform:** Broad flat > 600'

**Slope:** Gentle (10 to 20%)

**Aspect:** East

**Visit date:** 9/13/2011

**Ecological Health:** Poor.

**% Tree canopy:** 95%

**% Non-Native Cover:** 90

**General Note:**

Big leaf maple dominated forest with Douglas fir and Western red cedar coming up through the canopy.

**Management Note:**

Some large open areas, cleared of ground ivy-potentially former campsites.

**Eco Note:**

Pileated woodpecker seen.

**Primary Management concerns:** Invasives, Trampling, Soil Compaction, Domestic Animals, Litter, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	10-20"		Y	
Hedera helix (English ivy)	50% to 75%	Y			
Polystichum munitum (sword fern)	50% to 75%	Y			
Oemleria cerasiformis (Indian-plum)	10% to 20%	Y			
Vaccinium parvifolium (red huckleberry)	10% to 20%	Y			
Pseudotsuga menziesii (Douglas fir)	10% to 20%		10-20"		
Thuja plicata (western red cedar)	10% to 20%		10-20"		Y
Corylus cornuta (western beaked hazelnut)	10% to 20%				
Tsuga heterophylla (western hemlock)	1% to 10%		10-20"		
Abies grandis (grand fir)	1% to 10%		5-10"		
Ilex aquafolium (English holly)	1% to 10%			Y	
Prunus laurocerasus (English laurel)	1% to 10%		0-5"		
Acer circinatum (vine maple)	1% to 10%				
Berberis nervosa (Oregon grape)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Populus balsamifera ssp. trichocarpa (black cott)	trace		20-30"	Y	
Taxus brevifolia (Pacific yew)	trace		10-20"		
Crataegus monogyna (European hawthorn)	trace		0-5"		
Fraxinus latifolia (Oregon ash)	trace		0-5"		
Actaea rubra (red baneberry)	trace				
Adiantum pedatum (maidenhair fern)	trace				
Amelanchier alnifolia (serviceberry)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum)	trace				
Carex deweyana (Dewey sedge)	trace				
Carex hendersonii (Henderson's wood sedge)	trace				
Clematis vitalba (clematis)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Equisetum arvense (field horsetail)	trace				
Galium aparine (cleavers)	trace				
Gaultheria shallon (salal)	trace				
Geum urbanum (herb bennet)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Lapsana communis (common nipplewort)	trace				
Osmorhiza chilensis (mountain sweet-cicely)	trace	trace			
Philadelphus lewisii (Lewis' mockorange)	trace				
Polypodium glycyrrhiza (licorice fern)	trace				
Rhamnus purshiana (cascara)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus discolor (Himalayan blackberry)	trace				
Rubus ursinus (trailing blackberry)	trace				
Rumex obtusifolius (bitter dock)	trace				
Sambucus racemosa (red elderberry)	trace				
Smilacina stellata (starry false-Solomon's seal)	trace				



Solanum dulcamara (bittersweet nightshade)	trace
Sorbus aucuparia (European mountain ash)	trace
Stachys cooleyae (Cooley's hedgenettle)	trace
Tolmiea menziesii (piggy-back plant)	trace
Trillium ovatum (trillium)	trace
Urtica dioica (stinging nettle)	trace
Vancouveria hexandra (white inside-out-flower)	trace
Viola glabella (stream violet)	trace

## Unit RVNA\*008

**Size:** 4.08 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Deciduous forest

**NVCS Group:** Cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.84 North Pacific Broadleaf Mesic Seral Forest

**Landform:** Broad flat > 600'

**Slope:** Gentle (10 to 20%)

**Aspect:** Northeast

**Visit date:** 9/13/2011

**Ecological Health:** Poor.

**% Tree canopy:** 90%

**% Non-Native Cover:** 95

**Eco Note:**

Canopy dominated by big leaf maple. Evidence of woodpeckers on trees.

**Primary Management concerns:** Invasives, Erosion, Soil Compaction, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75% Y				
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"		
Polystichum munitum (sword fern)	50% to 75%	Y			
Thuja plicata (western red cedar)	10% to 20%		10-20"	Y	
Corylus cornuta (western beaked hazelnut)	1% to 10%	Y			
Vaccinium parvifolium (red huckleberry)	1% to 10%	Y			
Populus balsamifera ssp. trichocarpa (black cott	1% to 10%		20-30"		
Alnus rubra (red alder)	1% to 10%		10-20"		
Tsuga heterophylla (western hemlock)	1% to 10%		10-20"		
Ilex aquafolium (English holly)	1% to 10%		5-10"		
Acer circinatum (vine maple)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Rubus discolor (Himalayan blackberry)	1% to 10%				
Pseudotsuga menziesii (Douglas fir)	trace		10-20"		
Crataegus monogyna (European hawthorn)	trace		0-5"	Y	
Sorbus aucuparia (European mountain ash)	trace		0-5"		
Athyrium filix-femina (ladyfern)	trace				
Berberis nervosa (Oregon grape)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum	trace				
Carex densa (dense sedge)	trace				
Gaultheria shallon (salal)	trace				
Holodiscus discolor (oceanspray)	trace				
Lunaria annua (annual honesty)	trace				
Prunus laurocerasus (English laurel)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rhamnus purshiana (cascara)	trace				
Rubus parviflorus (thimbleberry)	trace				
Rubus ursinus (trailing blackberry)	trace				
Smilacina racemosa (false Solomon's-seal)	trace				
Symphoricarpos albus (snowberry)	trace				
Trillium ovatum (trillium)	trace				
Vancouveria hexandra (white inside-out-flower)	trace				

## Unit RVNA\*009

**Size:** 7.49 Acres

**NVCS Class:** Forest  
**NVCS Subclass:** Mixed evergreen-deciduous forest  
**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest  
**NVCS SubGroup:** Natural / Semi-natural  
**NVCS Ecological System:** unknown  
**Landform:** Canyon bottom < 600'  
**Slope:** Steep (20 to 30%)  
**Aspect:** East

**Visit date:** 9/14/2011

**Ecological Health:** Poor.

**% Tree canopy:** 85%

**% Non-Native Cover:** 95

**General Note:**

Large bike jump crossing creek bed.

**Management Note:**

Remove bike jumps. Address invasive species.

**Eco Note:**

Coyote scat. Large trees, TSHE, THPL in an ACMA3 dominated forest. One TSHE measured 39" dbh near creek bed. Heavy, mature ivy infestation. Lack of midstory shrubs.

**Wetland indicators:** Streams, Hydrophilic Vegetation, Standing Flowing Water.

**Primary Management concerns:** Invasives, Trampling, Soil Compaction, Litter, Large Refuse, Stream Bank Erosion, Mountain Bike Impact, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75%	Y			
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"	Y	
Tsuga heterophylla (western hemlock)	20% to 50%	Y	20-30"	Y	
Polystichum munitum (sword fern)	20% to 50%	Y			
Prunus laurocerasus (English laurel)	10% to 20%	Y			
Thuja plicata (western red cedar)	10% to 20%		20-30"	Y	
Pseudotsuga menziesii (Douglas fir)	10% to 20%		10-20"	Y	
Populus balsamifera ssp. trichocarpa (black cott	1% to 10%		20-30"		
Alnus rubra (red alder)	1% to 10%		10-20"		
Prunus avium (sweet pie cherry)	1% to 10%		10-20"		
Acer circinatum (vine maple)	1% to 10%				
Athyrium filix-femina (ladyfern)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Fraxinus latifolia (Oregon ash)	trace		0-5"	Y	
Adiantum pedatum (maidenhair fern)	trace				
Berberis nervosa (Oregon grape)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum	trace				
Clematis vitalba (clematis)	trace				
Equisetum arvense (field horsetail)	trace				
Equisetum hyemale (scouring-rush horsetail)	trace	trace			
Gaultheria shallon (salal)	trace				
Geum urbanum (herb bennet)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Osmorhiza chilensis (mountain sweet-cicely)	trace	trace			
Ranunculus repens (creeping buttercup)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus discolor (Himalayan blackberry)	trace				
Rubus ursinus (trailing blackberry)	trace				
Rumex obtusifolius (bitter dock)	trace				
Sambucus racemosa (red elderberry)	trace				
Solanum dulcamara (bittersweet nightshade)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Stachys cooleyae (Cooley's hedgenettle)	trace				
Symphoricarpos albus (snowberry)	trace				
Tolmiea menziesii (piggy-back plant)	trace				
Trillium ovatum (trillium)	trace				

**Unit RVNA\*010**

**Size:** 12.07 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.002 North Pacific Maritime-Wet-Mesic Douglas fir-Western hemlock Forest

**Landform:** Broad flat > 600'

**Slope:** Extremely Steep (over 30%)

**Aspect:** Northeast

**Visit date:** 9/13/2011

**Ecological Health:** Poor.

**% Tree canopy:** 85%

**% Non-Native Cover:** 95

**Management Note:**

Remove dangerous bike jump across ravine and culverts that have been put in along informal trail.

**Eco Note:**

Deer scat noted

**Wetland indicators:** Streams.

**Primary Management concerns:** Invasives, Erosion, Litter, Mountain Bike Impact.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	20-30"		Y	
Hedera helix (English ivy)	over 75% Y				
Polystichum munitum (sword fern)	over 75% Y				
Oemleria cerasiformis (Indian-plum)	20% to 50%	Y			
Tsuga heterophylla (western hemlock)	10% to 20%		20-30"		
Thuja plicata (western red cedar)	10% to 20%		10-20"	Y	
Corylus cornuta (western beaked hazelnut)	10% to 20%				
Ilex aquafolium (English holly)	10% to 20%				
Prunus laurocerasus (English laurel)	10% to 20%				
Rubus discolor (Himalayan blackberry)	10% to 20%				
Acer circinatum (vine maple)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Populus balsamifera ssp. trichocarpa (black cott	trace		20-30"	Y	
Alnus rubra (red alder)	trace		5-10"		
Adiantum pedatum (maidenhair fern)	trace				
Berberis nervosa (Oregon grape)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum	trace				
Carex deweyana (Dewey sedge)	trace				
Crataegus monogyna (European hawthorn)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Equisetum arvense (field horsetail)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rhamnus purshiana (cascara)	trace				
Rubus spectabilis (salmonberry)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Stachys cooleyae (Cooley's hedgenettle)	trace				
Symphoricarpos albus (snowberry)	trace				
Trillium ovatum (trillium)	trace				
Vancouveria hexandra (white inside-out-flower)	trace				

**Unit RVNA\*011**

**Size:** 5.59 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown  
**Landform:** Side-hill, Lower 3rd  
**Slope:** Steep (20 to 30%)  
**Aspect:** East

**Visit date:** 9/14/2011

**Ecological Health:** Poor.

**% Tree canopy:** 90%

**% Non-Native Cover:** 100

**Management Note:**

Remove bike jump along Trail #6.

**Eco Note:**

Bigleaf maple dominated canopy with severe ivy and clematis infestation. Limited shrub layer.

**Primary Management concerns:** Invasives, Litter, Mountain Bike Impact, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75% Y				
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"	Y	
Polystichum munitum (sword fern)	50% to 75%	Y			
Alnus rubra (red alder)	20% to 50%		20-30"		
Thuja plicata (western red cedar)	20% to 50%		10-20"	Y	
Clematis vitalba (clematis)	20% to 50%				
Populus balsamifera ssp. trichocarpa (black cott)	10% to 20%		20-30"		
Corylus cornuta (western beaked hazelnut)	1% to 10%	Y			
Prunus avium (sweet pie cherry)	1% to 10%		20-30"		
Pseudotsuga menziesii (Douglas fir)	1% to 10%		10-20"		
Tsuga heterophylla (western hemlock)	1% to 10%		10-20"	Y	
Acer circinatum (vine maple)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Pteridium aquilinum (bracken fern)	1% to 10%				
Rubus discolor (Himalayan blackberry)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus spectabilis (salmonberry)	1% to 10%				
Sambucus racemosa (red elderberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Crataegus monogyna (European hawthorn)	trace		0-5"		
Athyrium filix-femina (ladyfern)	trace				
Berberis nervosa (Oregon grape)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Phalaris arundinacea (reed canarygrass)	trace				
Ranunculus repens (creeping buttercup)	trace				
Symphoricarpos albus (snowberry)	trace				
Tellima grandiflora (fringe-cup)	trace				
Trillium ovatum (trillium)	trace				

## Unit RVNA\*012

**Size:** 4.09 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Lower 3rd

**Slope:** Extremely Steep (over 30%)

**Aspect:** East

**Visit date:** 9/29/2011

**Ecological Health:** Poor.

**% Tree canopy: 90%**

**% Non-Native Cover: 95**

**General Note:**

This unit borders Macadam Avenue and has extremely steep slopes along the eastern edge. Streams 1 & 2 cross the property. There is a pipe running along Stream 1 that is a water extraction for River View Cemetery.

**Management Note:**

Address invasive species.  
Improve Stream 2 crossing, trash rack is failing and impedes any wildlife crossing.  
Demand trail flagged by toilet paper leads to homeless camp in adjacent unit.

**Eco Note:**

This unit has good oversoty composition with several large PSME (37" dbh). Cooper's hawk heard in the area and two occipiters flying over head were observed along the western edge of the property. Deer trails and browse present. Knotweed present on site along road. Large TSHE (43" dbh).

**Wetland indicators:** Streams, Surface Water.

**Primary Management concerns:** Invasives, Utility Infrastructure, Hardscape Infrastructure, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"		
Hedera helix (English ivy)	50% to 75%	Y			
Rubus discolor (Himalayan blackberry)	50% to 75%	Y			
Pseudotsuga menziesii (Douglas fir)	10% to 20%		>30"		
Clematis vitalba (clematis)	10% to 20%				
Polystichum munitum (sword fern)	10% to 20%				
Symphoricarpos albus (snowberry)	10% to 20%				
Populus balsamifera ssp. trichocarpa (black cott	1% to 10%		20-30"	Y	
Thuja plicata (western red cedar)	1% to 10%		10-20"	Y	
Acer circinatum (vine maple)	1% to 10%				
Berberis nervosa (Oregon grape)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Polygonum cuspidatum (Japanese knotweed)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Tsuga heterophylla (western hemlock)	trace		10-20"	Y	
Fraxinus latifolia (Oregon ash)	trace		5-10"	Y	
Taxus brevifolia (Pacific yew)	trace		0-5"		
Adiantum pedatum (maidenhair fern)	trace				
Aesculus hippocastanum (horsechestnut)	trace				
Athyrium filix-femina (ladyfern)	trace				
Cornus sericea ssp. sericea (red-osier dogwood)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Holodiscus discolor (oceanspray)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rhamnus purshiana (cascara)	trace				
Rubus spectabilis (salmonberry)	trace				
Salix sitchensis (Sitka willow)	trace				
Sambucus racemosa (red elderberry)	trace				
Vaccinium parvifolium (red huckleberry)	trace				

**Unit RVNA\*013**

**Size:** 5.13 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Middle 3rd

**Slope:** Extremely Steep (over 30%)

**Aspect:** East

Visit date: 9/29/2011

**Ecological Health:** Poor.

**% Tree canopy:** 85%

**% Non-Native Cover:** 100

**General Note:**

Unit is bordered by Cemetery property and includes an inactive homeless camp

**Management Note:**

Address camp clean up and invasive species.

**Eco Note:**

Deer browse. Midstory more present than in some other units.

**Primary Management concerns:** Invasives, Trampling, Soil Compaction, Litter, Homeless Camp, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75%	Y			
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"		
Polystichum munitum (sword fern)	20% to 50%	Y			
Rubus discolor (Himalayan blackberry)	20% to 50%				
Oemleria cerasiformis (Indian-plum)	10% to 20%	Y			
Pseudotsuga menziesii (Douglas fir)	10% to 20%		>30"		
Clematis vitalba (clematis)	10% to 20%				
Prunus laurocerasus (English laurel)	10% to 20%				
Thuja plicata (western red cedar)	1% to 10%		10-20"	Y	
Alnus rubra (red alder)	1% to 10%		5-10"		
Acer circinatum (vine maple)	1% to 10%				
Berberis nervosa (Oregon grape)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Rubus spectabilis (salmonberry)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Fraxinus latifolia (Oregon ash)	trace		20-30"		
Abies grandis (grand fir)	trace		10-20"		
Agrostis sp. (bentgrass)	trace				
Carex deweyana (Dewey sedge)	trace				
Crataegus monogyna (European hawthorn)	trace				
Equisetum arvense (field horsetail)	trace				
Holcus lanatus (velvet grass)	trace				
Polypodium glycyrrhiza (licorice fern)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rhamnus purshiana (cascara)	trace				
Stachys cooleyae (Cooley's hedgenettle)	trace				
Vaccinium parvifolium (red huckleberry)	trace				

## Unit RVNA\*014

**Size:** 1.44 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Deciduous forest

**NVCS Group:** Cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Canyon bottom < 600'

**Slope:** Extremely Steep (over 30%)

**Aspect:** East

Visit date: 9/29/2011

**Ecological Health:** Poor.

**% Tree canopy:** 95%

**% Non-Native Cover:** 100

**General Note:**

This unit is the riparian area of Stream #2. It has a few small informal trails running through it marked by "flagging" from toilet paper.

**Management Note:**

Address invasive species

**Eco Note:**

The creek is flowing and has some nice wetland benches near the east end of the unit dominated by Carex obnupta. Lots of very large stumps in this area with VAPA and THPL. One large THPL 30+ dbh near west end of unit. Deer trails present near stream.

**Wetland indicators:** Streams, Hydrophilic Vegetation, Surface Water.

**Primary Management concerns:** Invasives, Litter, Stream Bank Erosion, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	10-20"			
Hedera helix (English ivy)	over 75% Y				
Polystichum munitum (sword fern)	50% to 75%	Y			
Rubus discolor (Himalayan blackberry)	20% to 50%	Y			
Rubus spectabilis (salmonberry)	10% to 20%	Y			
Alnus rubra (red alder)	10% to 20%		20-30"		
Thuja plicata (western red cedar)	1% to 10%		10-20"	Y	
Acer circinatum (vine maple)	1% to 10%				
Berberis nervosa (Oregon grape)	1% to 10%				
Clematis vitalba (clematis)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Holodiscus discolor (oceanspray)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Abies grandis (grand fir)	trace		10-20"		
Aesculus hippocastanum (horsechestnut)	trace		5-10"		
Populus balsamifera ssp. trichocarpa (black cott)	trace		0-5"	Y	
Adiantum pedatum (maidenhair fern)	trace				
Athyrium filix-femina (ladyfern)	trace				
Carex obnupta (slough sedge)	trace				
Cornus nuttallii (Pacific dogwood)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rubus parviflorus (thimbleberry)	trace				
Vancouveria hexandra (white inside-out-flower)	trace				

**Unit RVNA\*015**

**Size:** 3.96 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Lower 3rd

**Slope:** Extremely Steep (over 30%)

**Aspect:** East

**Visit date:** 9/20/2011

**Ecological Health:** Poor.

**% Tree canopy:** 90%

**% Non-Native Cover:** 100

**General Note:**

Unit is bounded by Stream #3, Macadam and Trail #4.

**Management Note:**

Evidence of old homeless camp, marked with GPS, ~ 5 bags of trash. Address invasives.

**Eco Note:**

Deer sign. Small mammal burrows in ground under cedars, (~2" diameter). High diversity of trees, PSME where present is large. Snags and large stumps.

**Wetland indicators:** Streams.

**Primary Management concerns:** Invasives, Litter, Homeless Camp.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75%	Y			
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	20-30"		
Pseudotsuga menziesii (Douglas fir)	20% to 50%	Y	20-30"		
Acer circinatum (vine maple)	10% to 20%	Y			
Corylus cornuta (western beaked hazelnut)	10% to 20%	Y			
Polystichum munitum (sword fern)	10% to 20%	Y			
Thuja plicata (western red cedar)	10% to 20%		20-30"	Y	
Rubus discolor (Himalayan blackberry)	10% to 20%				
Alnus rubra (red alder)	1% to 10%		10-20"		
Tsuga heterophylla (western hemlock)	1% to 10%		10-20"	Y	
Clematis vitalba (clematis)	1% to 10%				
Crataegus monogyna (European hawthorn)	1% to 10%				
Gaultheria shallon (salal)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Prunus avium (sweet pie cherry)	trace		10-20"	Y	
Salix scouleriana (Scouler's willow)	trace		10-20"		
Taxus brevifolia (Pacific yew)	trace		10-20"		
Abies grandis (grand fir)	trace		0-5"		
Acer platanoides (Norway maple)	trace		0-5"		
Aesculus hippocastanum (horsechestnut)	trace		0-5"		
Acer rubrum (red maple)	trace				
Adiantum pedatum (maidenhair fern)	trace				
Athyrium filix-femina (ladyfern)	trace				
Berberis nervosa (Oregon grape)	trace				
Carex deweyana (Dewey sedge)	trace				
Cornus sericea ssp. sericea (red-osier dogwood)	trace				
Disporum smithii (Smith's fairybells)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Mitella caulescens (leafy slightstemmed star Mit)	trace				
Prunus lusitanica (Portugal laurel)	trace				
Pteridium aquilinum (bracken fern)	trace				
Ranunculus repens (creeping buttercup)	trace				
Rhamnus purshiana (cascara)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus parviflorus (thimbleberry)	trace				
Rubus spectabilis (salmonberry)	trace				
Rubus ursinus (trailing blackberry)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Tellima grandiflora (fringecup)	trace				
Tolmiea menziesii (piggy-back plant)	trace				
Vancouveria hexandra (white inside-out-flower)	trace				

## Unit RVNA\*016

**Size:** 4.47 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.002 North Pacific Maritime-Wet-Mesic Douglas fir-

Western hemlock Forest

**Landform:** Broad flat > 600'

**Slope:** Extremely Steep (over 30%)

**Aspect:** Northeast

**Visit date:** 9/13/2011

**Ecological Health:** Poor.

**% Tree canopy:** 75%

**% Non-Native Cover:** 95

**General Note:**



Unit includes Stream 2.

**Management Note:**

Very large ivy and clematis vines present.

**Eco Note:**

Large stumps present. Owl feather and deer scat found.

**Wetland indicators:** Streams, Surface Water, Standing Flowing Water.

**Primary Management concerns:** Invasives, Litter, Stream Bank Erosion, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75%				
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	20-30"		
Tsuga heterophylla (western hemlock)	20% to 50%	Y	20-30"		
Prunus laurocerasus (English laurel)	20% to 50%	Y			
Clematis vitalba (clematis)	20% to 50%				
Polystichum munitum (sword fern)	20% to 50%				
Pseudotsuga menziesii (Douglas fir)	10% to 20%		10-20"		
Thuja plicata (western red cedar)	10% to 20%		10-20"	Y	
Ilex aquafolium (English holly)	10% to 20%				
Rubus discolor (Himalayan blackberry)	10% to 20%				
Acer circinatum (vine maple)	1% to 10%	Y			
Corylus cornuta (western beaked hazelnut)	1% to 10%	Y			
Alnus rubra (red alder)	1% to 10%		10-20"		
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Pteridium aquilinum (bracken fern)	1% to 10%				
Rubus spectabilis (salmonberry)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Berberis nervosa (Oregon grape)	trace				
Crataegus monogyna (European hawthorn)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Gaultheria shallon (salal)	trace				
Rhamnus purshiana (cascara)	trace				
Rubus parviflorus (thimbleberry)	trace				

**Unit RVNA\*017**

**Size:** 7.25 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** unknown

**Slope:** Extremely Steep (over 30%)

**Aspect:** unknown

**Visit date:** 9/20/2011

**Ecological Health:** Poor.

**% Tree canopy:** 95%

**% Non-Native Cover:** 100

**General Note:**

Unit is bordered by Stream #3, Trail #4, CAT grade and Macadam Blvd.

**Management Note:**

Some trash, evidence of old camps, nothing active. Address invasives.

**Eco Note:**

Large PSME along eastern boundary. Lots of deer sign, brows and bedding. Red-breasted sapsucker, scrub jay and chickadees observed. Large snag ~30" dbh, 75 ft high. Intermittent creek, water subsurface at times.

**Wetland indicators:** Streams, Surface Water.

**Primary Management concerns:** Invasives, Litter, Informal Trails.

## Visit Species:

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75%				
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"		
Polystichum munitum (sword fern)	20% to 50%				
Pseudotsuga menziesii (Douglas fir)	10% to 20%		>30"		
Clematis vitalba (clematis)	10% to 20%				
Rubus discolor (Himalayan blackberry)	10% to 20%				
Thuja plicata (western red cedar)	1% to 10%		20-30"	Y	
Alnus rubra (red alder)	1% to 10%		10-20"		
Acer circinatum (vine maple)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Populus balsamifera ssp. trichocarpa (black cott	trace		20-30"		
Abies grandis (grand fir)	trace		10-20"		
Prunus avium (sweet pie cherry)	trace		10-20"		
Aesculus hippocastanum (horsechestnut)	trace		0-5"		
Taxus brevifolia (Pacific yew)	trace		0-5"		
Adiantum pedatum (maidenhair fern)	trace				
Amelanchier alnifolia (serviceberry)	trace				
Athyrium filix-femina (ladyfern)	trace				
Carex deweyana (Dewey sedge)	trace				
Carex hendersonii (Henderson's wood sedge)	trace				
Crataegus monogyna (European hawthorn)	trace				
Disporum smithii (Smith's fairybells)	trace				
Equisetum arvense (field horsetail)	trace				
Equisetum hyemale (scouring-rush horsetail)	trace	trace			
Gaultheria shallon (salal)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Philadelphus lewisii (Lewis' mockorange)	trace				
Physocarpus capitatus (Pacific ninebark)	trace				
Poa species (bluegrass)	trace				
Prunus cerasifera (cherry plum)	trace				
Pteridium aquilinum (bracken fern)	trace				
Ranunculus repens (creeping buttercup)	trace				
Rhamnus purshiana (cascara)	trace				
Rubus parviflorus (thimbleberry)	trace				
Rubus spectabilis (salmonberry)	trace				
Rubus ursinus (trailing blackberry)	trace				
Sambucus mexicana (blue elderberry)	trace				
Sambucus racemosa (red elderberry)	trace				
Smilacina racemosa (false Solomon's-seal)	trace				
Spiraea douglasii (Douglas' spiraea)	trace				
Stachys cooleyae (Cooley's hedgenettle)	trace				
Tolmiea menziesii (piggy-back plant)	trace				
Toxicodendron diversilobum (poison oak)	trace				
Trillium ovatum (trillium)	trace				
Vaccinium parvifolium (red huckleberry)	trace				

## Unit RVNA\*018

**Size:** 2.70 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Deciduous forest

**NVCS Group:** Cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Middle 3rd

**Slope:** Gentle (10 to 20%)

**Aspect:** East

**Visit date:** 9/14/2011

**Ecological Health:** Poor.

**% Tree canopy:** 55%

**% Non-Native Cover:** 90

**Management Note:**

Lots of RUDI2 in open area in central portion of unit.

**Eco Note:**

Robust shrub layer, lots of large RHPU, PHCA11, HODI. Low lying open area with limited canopy bordered by ACMA3 forest. One 32" dbh FRLA.

**Wetland indicators: Hydrophilic Vegetation.**

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	20-30"	Y	
Hedera helix (English ivy)	50% to 75%	Y			
Polystichum munitum (sword fern)	50% to 75%	Y			
Fraxinus latifolia (Oregon ash)	20% to 50%	Y	20-30"	Y	
Corylus cornuta (western beaked hazelnut)	20% to 50%	Y			
Rhamnus purshiana (cascara)	20% to 50%	Y			
Rubus discolor (Himalayan blackberry)	20% to 50%	Y			
Acer circinatum (vine maple)	10% to 20%	Y			
Populus balsamifera ssp. trichocarpa (black cott)	10% to 20%		20-30"	Y	
Oemleria cerasiformis (Indian-plum)	10% to 20%				
Physocarpus capitatus (Pacific ninebark)	10% to 20%				
Alnus rubra (red alder)	1% to 10%		10-20"		
Thuja plicata (western red cedar)	1% to 10%		10-20"	Y	
Athyrium filix-femina (ladyfern)	1% to 10%				
Clematis vitalba (clematis)	1% to 10%				
Holodiscus discolor (oceanspray)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rosa gymnocarpa (dwarf wood rose)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Crataegus douglasii (Douglas' black hawthorn)	trace		0-5"	Y	
Crataegus monogyna (European hawthorn)	trace		0-5"		
Salix scouleriana (Scouler's willow)	trace		0-5"		
Amelanchier alnifolia (serviceberry)	trace				
Carex deweyana (Dewey sedge)	trace				
Equisetum hyemale (scouring-rush horsetail)		trace			
Gaultheria shallon (salal)	trace				
Juncus effusus (common soft Pacific rush)	trace				
Polypodium glycyrrhiza (licorice fern)	trace				
Rubus parviflorus (thimbleberry)	trace				
Symphoricarpos albus (snowberry)	trace				

**Unit RVNA\*019**

**Size:** 2.10 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Deciduous forest

**NVCS Group:** Cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.84 North Pacific Broadleaf Mesic Seral Forest

**Landform:** Side-hill, Lower 3rd

**Slope:** Steep (20 to 30%)

**Aspect:** East

**Visit date:** 9/14/2011

**Ecological Health:** Poor.

**% Tree canopy:** 80%

**% Non-Native Cover:** 95

**General Note:**

Unit is bordered by Macadam to the east and Trail #3 to the west.

**Management Note:**

Culvert needed at Stream 6/Trail#3 crossing, creek flows directly over the trail. Debris dumped in creek below trail.

**Eco Note:**

Stellar's jay, song sparrow in unit.

Unit is highly infested with invasives; ivy growing into the canopy of 90% of trees. Some evidence of ivy removal near the trail.

**Wetland indicators:** Streams.

**Primary Management concerns:** Invasives, Litter, Large Refuse, Stream Bank Erosion, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	10-20"	Y		
Hedera helix (English ivy)	over 75% Y				
Rubus discolor (Himalayan blackberry)	20% to 50%	Y			
Clematis vitalba (clematis)	10% to 20%				
Polystichum munitum (sword fern)	10% to 20%				
Corylus cornuta (western beaked hazelnut)	1% to 10%	Y			
Oemleria cerasiformis (Indian-plum)	1% to 10%	Y			
Pseudotsuga menziesii (Douglas fir)	1% to 10%		20-30"		
Thuja plicata (western red cedar)	1% to 10%		20-30"		
Alnus rubra (red alder)	1% to 10%		10-20"		
Acer circinatum (vine maple)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Pteridium aquilinum (bracken fern)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Smilacina racemosa (false Solomon's-seal)	1% to 10%				
Populus balsamifera ssp. trichocarpa (black cott	trace		>30"	Y	
Fraxinus latifolia (Oregon ash)	trace		20-30"		
Prunus emarginata (bitter cherry)	trace		5-10"		
Acer platanoides (Norway maple)	trace		0-5"		
Athyrium filix-femina (ladyfern)	trace				
Convolvulus arvensis (morning glory)	trace				
Crataegus monogyna (European hawthorn)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Equisetum arvense (field horsetail)	trace				
Geum urbanum (herb bennet)	trace				
Holodiscus discolor (oceanspray)	trace				
Rhamnus purshiana (cascara)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus spectabilis (salmonberry)	trace				
Rumex crispus (dock)	trace				
Sambucus racemosa (red elderberry)	trace				
Symphoricarpos albus (snowberry)	trace				
Vaccinium parvifolium (red huckleberry)	trace				

**Unit RVNA\*020**

**Size:** 6.54 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Lower 3rd

**Slope:** Extremely Steep (over 30%)

**Aspect:** East

**Visit date:** 9/20/2011

**Ecological Health:** Poor.

**% Tree canopy:** 80%

**% Non-Native Cover:** 100

**General Note:**

Bordered by Trail 6, 7 and CAT grade

Streams #4 and 5 flow through site, no water flowing during inventory.

**Management Note:**

Address invasive species.

**Eco Note:**

Deer path, browsing. Scrub jay and chickadees observed. Some large Douglas firs and cedars. More of a mid-story present than on other plots.

**Wetland indicators:** Streams.

**Primary Management concerns:** Invasives, Mountain Bike Impact, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75% Y				
Polystichum munitum (sword fern)	50% to 75%	Y			
Acer macrophyllum (bigleaf maple)	50% to 75%		10-20"		
Pseudotsuga menziesii (Douglas fir)	20% to 50%		>30"		
Acer circinatum (vine maple)	10% to 20%	Y			
Clematis vitalba (clematis)	10% to 20%				
Rubus discolor (Himalayan blackberry)	10% to 20%				
Alnus rubra (red alder)	1% to 10%		10-20"	Y	
Populus balsamifera ssp. trichocarpa (black cott)	1% to 10%		10-20"	Y	
Thuja plicata (western red cedar)	1% to 10%		10-20"	Y	
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Stachys cooleyae (Cooley's hedgenettle)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Taxus brevifolia (Pacific yew)	trace	Y	0-5"	Y	
Tsuga heterophylla (western hemlock)	trace		5-10"		
Adiantum pedatum (maidenhair fern)	trace				
Amelanchier alnifolia (serviceberry)	trace				
Berberis nervosa (Oregon grape)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum)	trace				
Carex densa (dense sedge)	trace				
Carex hendersonii (Henderson's wood sedge)	trace				
Cirsium sp. (thistle)	trace				
Crataegus monogyna (European hawthorn)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Equisetum arvense (field horsetail)	trace				
Gaultheria shallon (salal)	trace				
Geum urbanum (herb bennet)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Ilex aquafolium (English holly)	trace				
Juncus effusus (common soft Pacific rush)	trace				
Prunus lusitanica (Portugal laurel)	trace				
Pteridium aquilinum (bracken fern)	trace				
Ranunculus repens (creeping buttercup)	trace				
Rhamnus purshiana (cascara)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus spectabilis (salmonberry)	trace				
Rubus ursinus (trailing blackberry)	trace				
Rumex obtusifolius (bitter dock)	trace				
Sambucus racemosa (red elderberry)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Ulmus sp. (elm tree)	trace				
Vaccinium parvifolium (red huckleberry)	trace				

**Unit RVNA\*021**

**Size:** 5.58 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.002 North Pacific Maritime-Wet-Mesic-Douglas fir-

Western hemlock Forest

**Landform:** Broad flat > 600'

**Slope:** Gentle (10 to 20%)

**Aspect:** East

**Visit date:** 9/9/2011

**Ecological Health:** Poor.

**% Tree canopy:** 95%

**% Non-Native Cover:** 95

**General Note:**

Adjacent to North Drive, south of wetland and stream #6

**Management Note:**

Address invasive species

**Eco Note:**

Pileated woodpecker sign

Good overstory structure, although tree ivy threatening 80% of trees

No dominant shrub species due to simplified structure

**Primary Management concerns:** Invasives, Litter, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75% Y				
Acer macrophyllum (bigleaf maple)	50% to 75%		10-20"		
Rubus discolor (Himalayan blackberry)	20% to 50%	Y			
Thuja plicata (western red cedar)	10% to 20%	Y	10-20"	Y	
Alnus rubra (red alder)	10% to 20%		10-20"		
Polystichum munitum (sword fern)	10% to 20%				
Populus balsamifera ssp. trichocarpa (black cott	1% to 10%		>30"	Y	
Pseudotsuga menziesii (Douglas fir)	1% to 10%		>30"		
Abies grandis (grand fir)	1% to 10%		10-20"	Y	
Acer pseudoplatanus (Sycamore maple)	1% to 10%		10-20"	Y	
Tsuga heterophylla (western hemlock)	1% to 10%		10-20"	Y	
Prunus avium (sweet pie cherry)	1% to 10%		5-10"	Y	
Acer circinatum (vine maple)	1% to 10%				
Berberis nervosa (Oregon grape)	1% to 10%				
Clematis vitalba (clematis)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Equisetum hyemale (scouring-rush horsetail)		1% to 10%			
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Vinca minor (common small-leaf periwinkle)	1% to 10%				
Prunus cerasifera (cherry plum)	trace		0-5"		
Sorbus aucuparia (European mountain ash)	trace		0-5"		
Alliaria petiolata (garlic mustard)	trace				
Athyrium filix-femina (ladyfern)	trace				
Daucus carota (Queen Anne's lace)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Gaultheria shallon (salal)	trace				
Holodiscus discolor (oceanspray)	trace				
Lapsana communis (common nipplewort)	trace				
Lathyrus latifolius (perennial pea)	trace				
Prunus lusitanica (Portugal laurel)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus leucodermis (Western black-cap)	trace				
Rubus parviflorus (thimbleberry)	trace				
Sambucus racemosa (red elderberry)	trace				
Stachys cooleyae (Cooley's hedgenettle)	trace				
Symphoricarpos albus (snowberry)	trace				
Tolmiea menziesii (piggy-back plant)	trace				
Trillium ovatum (trillium)	trace				
Urtica dioica (stinging nettle)	trace				
Vaccinium parvifolium (red huckleberry)	trace				

**Unit RVNA\*022**

**Size:** 13.50 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.84 North Pacific Broadleaf Mesic Seral Forest

**Landform:** Side-hill, Upper 3rd

**Slope:** Gentle (10 to 20%)

**Aspect:** East

**Visit date:** 9/13/2011

**Ecological Health:** Poor.

**% Tree canopy:** 95%

**% Non-Native Cover:** 90

## General Note:

Unit is bordered by Stream #6, headwaters and wetland.  
Trails 7,1 and 3B bisect and border property.

## Management Note:

Address invasive species and trail density. Evidence of old bike jumps with trail running through wetland, not currently being used and are naturally recovering. Garlic mustard is present and currently patchy throughout unit.

## Eco Note:

Maple dominated overstory with some patches of conifer. Good conifer diversity. English ivy present in canopy of 80% of mature trees and blanketing understory. Heard black-capped chickadees, red breasted nuthatch, pacific wren, crow and Stellar's jay.

## Primary Management concerns: Invasives, Litter, Vandalism, Mountain Bike Impact, Informal Trails.

## Visit Species:

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75% Y				
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	>30"	Y	
Polystichum munitum (sword fern)	20% to 50%	Y			
Thuja plicata (western red cedar)	10% to 20%		10-20"	Y	
Acer circinatum (vine maple)	1% to 10%	Y			
Corylus cornuta (western beaked hazelnut)	1% to 10%	Y			
Abies grandis (grand fir)	1% to 10%		20-30"		
Populus balsamifera ssp. trichocarpa (black cott)	1% to 10%		20-30"	Y	
Pseudotsuga menziesii (Douglas fir)	1% to 10%		20-30"	Y	
Fraxinus latifolia (Oregon ash)	1% to 10%		10-20"	Y	
Alnus rubra (red alder)	1% to 10%		5-10"		
Alliaria petiolata (garlic mustard)	1% to 10%				
Berberis nervosa (Oregon grape)	1% to 10%				
Carex deweyana (Dewey sedge)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rubus discolor (Himalayan blackberry)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Vancouveria hexandra (white inside-out-flower)	1% to 10%				
Prunus emarginata (bitter cherry)	trace		5-10"		
Tsuga heterophylla (western hemlock)	trace		5-10"		
Castanea species (Chestnut species)	trace		0-5"	Y	
Adiantum pedatum (maidenhair fern)	trace				
Agrostis sp. (bentgrass)	trace				
Amelanchier alnifolia (serviceberry)	trace				
Asarum caudatum (wild ginger)	trace				
Athyrium filix-femina (ladyfern)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum)	trace				
Cardamine oligosperma (few-seeded little western)	trace				
Carex hendersonii (Henderson's wood sedge)	trace				
Carex obnupta (slough sedge)	trace				
Clematis vitalba (clematis)	trace				
Crataegus monogyna (European hawthorn)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Elymus glaucus (blue Vancouver wildrye)	trace				
Equisetum arvense (field horsetail)	trace				
Galium triflorum (sweet-scented fragrant Bedstra)	trace				
Gaultheria shallon (salal)	trace				
Geranium robertianum (herb-Robert)	trace				
Geum urbanum (herb bennet)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Juncus effusus (common soft Pacific rush)	trace				
Lapsana communis (common nipplewort)	trace				
Lathyrus latifolius (perennial pea)	trace				
Ligustrum vulgare (European privet)	trace				
Lonicera ciliosa (western orange honeysuckle)	trace				
Luzula parviflora (small-flowered millet Woodrus)	trace				
Melissa officinalis (lemon balm)	trace				
Montia sibirica (Siberian minerslettuce)	trace				
Osmorhiza chilensis (mountain sweet-cicely)	trace	trace			
Philadelphus lewisii (Lewis' mockorange)	trace				
Polypodium glycyrrhiza (licorice fern)	trace				
Prunus cerasifera (cherry plum)	trace				
Prunus lusitanica (Portugal laurel)	trace				
Pteridium aquilinum (bracken fern)	trace				
Ranunculus repens (creeping buttercup)	trace				
Rhamnus purshiana (cascara)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Rubus ursinus (trailing blackberry)	trace				
Rumex obtusifolius (bitter dock)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Stellaria media (common chickweed)	trace				

Tellima grandiflora (fringe-cup)	trace
Tolmiea menziesii (piggy-back plant)	trace
Trientalis latifolia (western broad-leaf starflo)	trace
Trillium ovatum (trillium)	trace
Urtica dioica (stinging nettle)	trace
Viola glabella (stream violet)	trace

## Unit RVNA\*023

**Size:** 4.94 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Middle 3rd

**Slope:** Steep (20 to 30%)

**Aspect:** East

**Visit date:** 9/20/2011

**Ecological Health:** Poor.

**% Tree canopy:** 95%

**% Non-Native Cover:** 90

**General Note:**

Unit is bordered by Stream #6, Trails 1, 7 & 2.

**Management Note:**

Address invasives.

Remove camps and tree forts.

**Eco Note:**

Two camps found in area and recorded on GPS, lower camp accessed from waterfall area-plywood and ~1 bag of trash. Both camps have a bathroom and fire ring.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	20-30"			
Hedera helix (English ivy)	over 75% Y				
Polystichum munitum (sword fern)	over 75% Y				
Berberis nervosa (Oregon grape)	10% to 20%				
Ilex aquafolium (English holly)	10% to 20%				
Prunus laurocerasus (English laurel)	10% to 20%				
Populus balsamifera ssp. trichocarpa (black cott	1% to 10%		20-30"	Y	
Alnus rubra (red alder)	1% to 10%		10-20"		
Thuja plicata (western red cedar)	1% to 10%		10-20"	Y	
Acer circinatum (vine maple)	1% to 10%				
Clematis vitalba (clematis)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Crataegus monogyna (European hawthorn)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Pteridium aquilinum (bracken fern)	1% to 10%				
Rosa gymnocarpa (dwarf wood rose)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus spectabilis (salmonberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Tsuga heterophylla (western hemlock)	trace		10-20"	Y	
Abies grandis (grand fir)	trace		0-5"	Y	
Pseudotsuga menziesii (Douglas fir)	trace		0-5"		
Athyrium filix-femina (ladyfern)	trace				
Bromus vulgaris (narrow-flowered Columbian Colum	trace				
Carex deweyana (Dewey sedge)	trace				
Carex hendersonii (Henderson's wood sedge)	trace				
Disporum hookeri (Hooker's fairybells)	trace				
Gaultheria shallon (salal)	trace				
Geum urbanum (herb bennet)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Lactuca muralis (wall lettuce)	trace				
Lapsana communis (common nipplewort)	trace				
Osmorhiza chilensis (mountain sweet-cicely)	trace	trace			
Polypodium glycyrrhiza (licorice fern)	trace				
Prunus avium (sweet pie cherry)	trace				



Prunus cerasifera (cherry plum)	trace
Prunus sp. (cultivated cherry tree)	trace
Ranunculus repens (creeping buttercup)	trace
Rhamnus purshiana (cascara)	trace
Rubus discolor (Himalayan blackberry)	trace
Rubus ursinus (trailing blackberry)	trace
Sambucus racemosa (red elderberry)	trace
Smilacina stellata (starry false-Solomon's seal)	trace
Sorbus aucuparia (European mountain ash)	trace
Stachys cooleyae (Cooley's hedgenettle)	trace
Symphoricarpos albus (snowberry)	trace
Tolmiea menziesii (piggy-back plant)	trace
Trillium ovatum (trillium)	trace
Urtica dioica (stinging nettle)	trace
Vancouveria hexandra (white inside-out-flower)	trace
Viola glabella (stream violet)	trace

## Unit RVNA\*024

**Size:** 3.91 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.84 North Pacific Broadleaf Mesic Seral Forest

**Landform:** Broad flat > 600'

**Slope:** Gentle (10 to 20%)

**Aspect:** Northeast

**Visit date:** 9/9/2011

**Ecological Health:** Poor.

**% Tree canopy:** 90%

**% Non-Native Cover:** 95

### General Note:

Unit is east of "hub" (central network of trails) bounded by informal trails.

Homeless camp found just south of Trail #7 directly south of party spot. Party clearing with multiple demand trails.

### Management Note:

Address homeless camp, party clearing and invasive species

### Eco Note:

Pileated woodpecker sign

Extreme ivy cover

**Primary Management concerns:** Invasives, Trampling, Soil Compaction, Domestic Animals, Litter, Homeless Camp, Mountain Bike Impact, Informal Trails.

### Visit Species:

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75%	Y			
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"		
Polystichum munitum (sword fern)	50% to 75%	Y			
Alnus rubra (red alder)	10% to 20%		10-20"		
Thuja plicata (western red cedar)	10% to 20%		10-20"		
Prunus laurocerasus (English laurel)	10% to 20%				
Pseudotsuga menziesii (Douglas fir)	1% to 10%		10-20"		
Abies grandis (grand fir)	1% to 10%		0-5"	Y	
Alliaria petiolata (garlic mustard)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Gaultheria shallon (salal)	1% to 10%				
Hydrophyllum tenuipes (Pacific waterleaf)	1% to 10%				
Ilex aquafolium (English holly)	1% to 10%				
Oemleria cerasiformis (Indian-plum)	1% to 10%				
Rubus discolor (Himalayan blackberry)	1% to 10%				
Vancouveria hexandra (white inside-out-flower)	1% to 10%				
Populus balsamifera ssp. trichocarpa (black cott)	trace		20-30"	Y	
Tsuga heterophylla (western hemlock)	trace		10-20"	Y	
Taxus brevifolia (Pacific yew)	trace		5-10"		
Achlys triphylla (vanillaleaf)	trace				

Asarum caudatum (wild ginger)	trace	
Athyrium filix-femina (ladyfern)	trace	
Berberis nervosa (Oregon grape)	trace	
Bromus vulgaris (narrow-flowered Columbian Colum	trace	
Carex deweyana (Dewey sedge)	trace	
Carex hendersonii (Henderson's wood sedge)	trace	
Clematis vitalba (clematis)	trace	
Crataegus monogyna (European hawthorn)	trace	Y
Disporum hookeri (Hooker's fairybells)	trace	
Geranium robertianum (herb-Robert)	trace	
Geum urbanum (herb bennet)	trace	
Lactuca muralis (wall lettuce)	trace	
Lapsana communis (common nipplewort)	trace	
Osmorhiza chilensis (mountain sweet-cicely)	trace	trace
Oxalis suksdorfii (Suksdorf Woodsorrel)	trace	
Philadelphus lewisii (Lewis' mockorange)	trace	
Polypodium glycyrrhiza (licorice fern)	trace	
Ranunculus repens (creeping buttercup)	trace	
Rhamnus purshiana (cascara)	trace	
Rosa gymnocarpa (dwarf wood rose)	trace	
Rubus parviflorus (thimbleberry)	trace	
Rubus ursinus (trailing blackberry)	trace	
Rumex obtusifolius (bitter dock)	trace	
Sambucus racemosa (red elderberry)	trace	
Symphoricarpos albus (snowberry)	trace	
Tellima grandiflora (fringecup)	trace	
Tiarella trifoliata (foamflower)	trace	
Trillium ovatum (trillium)	trace	
Urtica dioica (stinging nettle)	trace	
Vaccinium parvifolium (red huckleberry)	trace	

## Unit RVNA\*025

**Size:** 3.59 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** CES204.002 North Pacific Maritime-Wet-Mesic-Douglas fir-

Western hemlock Forest

**Landform:** Broad flat > 600'

**Slope:** Gentle (10 to 20%)

**Aspect:** East

## Visit date: 9/9/2011

**Ecological Health:** Poor.

**% Tree canopy:** 90%

**% Non-Native Cover:** 100

### General Note:

Unit is adjacent to SW Palatine Hill Road

Multiple informal trails running perpendicular to road

### Management Note:

Address invasive species and informal trails

### Eco Note:

Owl feather and coyote scat found

Unique plant and invasive community adjacent to roadway

**Primary Management concerns:** Invasives, Litter, Informal Trails.

### Visit Species:

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Hedera helix (English ivy)	over 75% Y				
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"		
Abies grandis (grand fir)	20% to 50%		10-20"	Y	
Polystichum munitum (sword fern)	20% to 50%				
Prunus laurocerasus (English laurel)	10% to 20%	Y			
Populus balsamifera ssp. trichocarpa (black cott	10% to 20%		20-30"	Y	
Pseudotsuga menziesii (Douglas fir)	10% to 20%		20-30"	Y	

Thuja plicata (western red cedar)	10% to 20%		10-20"	Y
Corylus cornuta (western beaked hazelnut)	1% to 10%	Y		
Alnus rubra (red alder)	1% to 10%		10-20"	Y
Fraxinus latifolia (Oregon ash)	1% to 10%		10-20"	Y
Tsuga heterophylla (western hemlock)	1% to 10%		5-10"	
Acer circinatum (vine maple)	1% to 10%			
Ilex aquafolium (English holly)	1% to 10%			
Oemleria cerasiformis (Indian-plum)	1% to 10%			
Rubus discolor (Himalayan blackberry)	1% to 10%			
Rubus parviflorus (thimbleberry)	1% to 10%			
Prunus avium (sweet pie cherry)	trace		5-10"	
Acer platanoides (Norway maple)	trace		0-5"	Y
Sorbus aucuparia (European mountain ash)	trace		0-5"	Y
Taxus brevifolia (Pacific yew)	trace		0-5"	
Alliaria petiolata (garlic mustard)	trace			
Athyrium filix-femina (ladyfern)	trace			
Aucuba japonica (Japanese laurel)	trace			
Berberis nervosa (Oregon grape)	trace			
Bromus vulgaris (narrow-flowered Columbian Colum)	trace			
Clematis vitalba (clematis)	trace			
Convolvulus arvensis (morning glory)	trace			
Crataegus monogyna (European hawthorn)	trace			
Disporum hookeri (Hooker's fairybells)	trace			
Gaultheria shallon (salal)	trace			
Geranium robertianum (herb-Robert)	trace			
Geum urbanum (herb bennet)	trace			
Holodiscus discolor (oceanspray)	trace			
Lapsana communis (common nipplewort)	trace			
Lonicera ciliosa (western orange honeysuckle)	trace			
Philadelphus lewisii (Lewis' mockorange)	trace			
Plantago major (common plantain)	trace			
Polygonatum biflorum (smooth Solomon's seal)	trace			
Pteridium aquilinum (bracken fern)	trace			
Rosa (rose)	trace			
Rosa gymnocarpa (dwarf wood rose)	trace			
Rubus ursinus (trailing blackberry)	trace			
Rumex obtusifolius (bitter dock)	trace			
Sambucus mexicana (blue elderberry)	trace			
Smilacina racemosa (false Solomon's-seal)	trace			
Solanum dulcamara (bittersweet nightshade)	trace			
Stellaria crisper (ruffled starwort)	trace			
Taraxacum officinale (common dandelion)	trace			
Trillium ovatum (trillium)	trace			
Vaccinium parvifolium (red huckleberry)	trace			
Vancouveria hexandra (white inside-out-flower)	trace			
Vitis L. (Grape)	trace			

## Unit RVNA\*026

**Size:** 4.65 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Mixed evergreen-deciduous forest

**NVCS Group:** Mixed needle-leaved evergreen - cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Lower 3rd

**Slope:** Extremely Steep (over 30%)

**Aspect:** East

**Visit date:** 9/14/2011

**Ecological Health:** Poor.

**% Tree canopy:** 95%

**% Non-Native Cover:** 95

**Management Note:**

Includes large gathering/plant area with large tree fort. Garbage, litter, left tent/tarp/chairs at end of Trail #7B.

**Eco Note:**

Bigleaf maple dominated forest with limited shrub layer

Large trees in parts of unit

Measured one POBAT (35" dbh) and an ACMA3 (30" dbh)

Large English holly in unit

**Primary Management concerns:** Invasives, Trampling, Soil Compaction, Domestic Animals, Litter, Large Refuse, Hardscape Infrastructure, Vandalism, Informal Trails.

**Visit Species:**

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	over 75% Y	20-30"			
Hedera helix (English ivy)	over 75% Y				
Polystichum munitum (sword fern)	over 75% Y				
Thuja plicata (western red cedar)	20% to 50%		10-20"	Y	
Corylus cornuta (western beaked hazelnut)	10% to 20%	Y			
Oemleria cerasiformis (Indian-plum)	10% to 20%				
Prunus laurocerasus (English laurel)	10% to 20%				
Populus balsamifera ssp. trichocarpa (black cott	1% to 10%		20-30"	Y	
Tsuga heterophylla (western hemlock)	1% to 10%		20-30"		
Alnus rubra (red alder)	1% to 10%		10-20"		
Pseudotsuga menziesii (Douglas fir)	1% to 10%		10-20"		
Acer circinatum (vine maple)	1% to 10%				
Athyrium filix-femina (ladyfern)	1% to 10%				
Clematis vitalba (clematis)	1% to 10%				
Rosa gymnocarpa (dwarf wood rose)	1% to 10%				
Rubus discolor (Himalayan blackberry)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus spectabilis (salmonberry)	1% to 10%				
Symphoricarpos albus (snowberry)	1% to 10%				
Vaccinium parvifolium (red huckleberry)	1% to 10%				
Aesculus hippocastanum (horsechestnut)	trace		0-5"		
Crataegus monogyna (European hawthorn)	trace		0-5"		
Prunus avium (sweet pie cherry)	trace		0-5"	Y	
Sorbus aucuparia (European mountain ash)	trace		0-5"		
Bromus vulgaris (narrow-flowered Columbian Colum	trace				
Carex deweyana (Dewey sedge)	trace				
Carex obnupta (slough sedge)	trace				
Gaultheria shallon (salal)	trace				
Holodiscus discolor (oceanspray)	trace				
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Lapsana communis (common nipplewort)	trace				
Pteridium aquilinum (bracken fern)	trace				
Ranunculus repens (creeping buttercup)	trace				
Rhamnus purshiana (cascara)	trace				
Rubus ursinus (trailing blackberry)	trace				
Rumex obtusifolius (bitter dock)	trace				
Sambucus racemosa (red elderberry)	trace				
Smilacina racemosa (false Solomon's-seal)	trace				
Stachys cooleyae (Cooley's hedgenettle)	trace				

**Unit RVNA\*027**

**Size:** 1 Acres

**NVCS Class:** Forest

**NVCS Subclass:** Deciduous forest

**NVCS Group:** Cold-deciduous forest

**NVCS SubGroup:** Natural / Semi-natural

**NVCS Ecological System:** unknown

**Landform:** Side-hill, Middle 3rd

**Slope:** Steep (20 to 30%)

**Aspect:** Northeast

**Visit date:** 9/14/2011

**Ecological Health:** Fair.

**% Tree canopy:** 75%

**% Non-Native Cover:** 80

**Management Note:**

Address invasive species

**Eco Note:**

Song sparrow, flicker, barred owl (chasing flicker)

Vegetation suggests wetland conditions

**Wetland indicators:** Hydrophilic Vegetation.

## Primary Management concerns: Invasives.

### Visit Species:

	COVER CLASS	DOMINANT	DBH	REGENERATING	PLANTED
Acer macrophyllum (bigleaf maple)	50% to 75%	Y	10-20"		
Rubus discolor (Himalayan blackberry)	50% to 75%	Y			
Hedera helix (English ivy)	50% to 75%				
Physocarpus capitatus (Pacific ninebark)	20% to 50%	Y			
Fraxinus latifolia (Oregon ash)	20% to 50%		10-20"		
Rubus spectabilis (salmonberry)	10% to 20%				
Populus balsamifera ssp. trichocarpa (black cott	1% to 10%		20-30"	Y	
Alnus rubra (red alder)	1% to 10%		10-20"		
Thuja plicata (western red cedar)	1% to 10%		5-10"	Y	
Acer circinatum (vine maple)	1% to 10%				
Athyrium filix-femina (ladyfern)	1% to 10%				
Carex obnupta (slough sedge)	1% to 10%				
Corylus cornuta (western beaked hazelnut)	1% to 10%				
Equisetum arvense (field horsetail)	1% to 10%				
Oenanthe sarmentosa (Pacific water-parsely)		1% to 10%			
Polystichum munitum (sword fern)	1% to 10%				
Prunus laurocerasus (English laurel)	1% to 10%				
Rubus parviflorus (thimbleberry)	1% to 10%				
Rubus ursinus (trailing blackberry)	1% to 10%				
Stachys cooleyae (Cooley's hedgenettle)	1% to 10%				
Tsuga heterophylla (western hemlock)	trace		10-20"		
Betula pendula (European white birch)	trace		5-10"		
Hydrophyllum tenuipes (Pacific waterleaf)	trace				
Malus fusca (Oregon crabapple)	trace				
Oemleria cerasiformis (Indian-plum)	trace				
Pteridium aquilinum (bracken fern)	trace				
Rosa gymnocarpa (dwarf wood rose)	trace				
Sorbus aucuparia (European mountain ash)	trace				
Tolmiea menziesii (piggy-back plant)	trace				
Vaccinium parvifolium (red huckleberry)	trace				